MAY 1 7 2004

OFFICIAL

60130-1026 01MRA0140

IN THE SPECIFICATION

Please replace paragraph 22 on page 4 with the paragraph below:

Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views and embodiments, a laminated bushing generally indicated at 10 is shown in Figure 1. The laminated bushing 10 includes a metal sheet 12 spirally wound about a longitudinal axis 14 to form a spirally shaped cavity 20. A resilient material 16 such as rubber is disposed between the metal sheet 12 and within the spiral shaped cavity 20. Preferably, the resilient material 16 is mechanically compressed between the metal sheets 12. Alternatively, the resilient material 16 can be rubber that is vulcanized after formation of the laminated bushing 10. It should be understood that the resilient material 16 could be of any type known in the art. Preferably, the inner sleeve 22 is rotatable relative to an outer sleeve 18 in a proportional manner related to the specific material properties of the resilient material 16. The spirally wound metal sheet 12 is inserted into the outer sleeve 18. The inner sleeve 22 is formed concentric with the outer sleeve 18 about the longitudinal axis 14. The inner sleeve 22 is movable along the longitudinal axis 14 relative to the outer sleeve18 in a proportional manner dependent on the specific properties of the resilient material 16.

Please replace paragraph 23 on pages 4 and 5 with the paragraph below:

Referring to Figure 2, another embodiment of the laminated bushing includes a plurality of mechanically formed grooves 24. The grooves 24 are formed at intervals along the longitudinal axis 14 of the laminated bushing 10. Preferably, the grooves 24 are part of the metal sheet and become an integral part of the laminated bushing throughout the entire spirally wound laminated bushing 10. The grooves 24 direct movement of the inner sleeve 22 relative to the outer sleeve 18 by increasing the resistance to movement in a direction across or perpendicular to the grooves 24. The grooves 24 increase resistance of the resilient material 16 in a direction perpendicular to the grooves 24. In this embodiment, the grooves 24 are arranged at intervals about the longitudinal axis 14 to increase resistance to movement of the inner sleeve 22 along the longitudinal axis 14 relative to the outer sleeve 18.

60130-1026 01MRA0140

Please replace paragraph 24 on page 5 with the paragraph below:

Referring to Figure 3, another embodiment including a plurality of grooves 26 is disclosed. In this embodiment, the grooves 26 are positioned longitudinally throughout the entire laminated bushing 10. The grooves 26 are formed within the metal sheet 12 to direct movement of the inner sleeve 22 relative to the outer sleeve 18 by increasing resistance to motion perpendicular to the grooves 26. The longitudinal grooves 26 are disposed longitudinally to resist rotational movement of the inner sleeve 22 relative to the outer sleeve 18 thereby encouraging movement along the longitudinal axis 14. Movement along the longitudinal axis 14 would be such that the inner sleeve 22 moves in a telescoping motion relative to the outer sleeve 18.

Please replace paragraph 25 on page 5 with the paragraph below:

Referring to Figure 4, another embodiment of the laminated bushing 10 is shown. The laminated bushing includes a plurality of spirally wound grooves 28 within the metal sheet 12 such that the resilient material 16 is directed for both rotational and axial movement. The spirally wound groves grooves 28 direct the inner sleeve 22 to rotate about the longitudinal axis 14 in proportion to movement along the longitudinal axis 14. The spirally wound grooves 28 direct movement of the inner sleeve 22 relative to the outer sleeve 18 along the longitudinal axis 14 in proportion to rotation about the longitudinal axis 14. In other words, the inner sleeve 22 has a lower resistance to movement in a telescoping, rotational manner relative to the outer sleeve 18.

60130-1026 01MRA0140

Please replace paragraph 27 on page 6 with the paragraph below:

Referring to Figure 5, a leaf spring assembly 44 is shown including the laminated bushings 10 having spirally wound grooves 28. The laminated bushings 10 enable control of the direction of motion to assist in the changing wheel alignment by changing chamber, castor, toe and the like. The laminated bushings 10 are part of the hanger mounting bracket 46 and move proportionally in response to compression of the leaf spring assembly 44. Movement of the leaf spring assembly 44 can be used to direct movement of the leaf spring assembly 44 to adjust over-steer or under-steer. The laminated bushings 10 are arranged such that compression of the leaf spring 44 moves the rear bushing in one direction and moves the front bushing in the opposite direction to provide a pivoting movement of the entire leaf spring assembly 44 as shown by the arrows A.

Please replace paragraph 28 on page 6 with the paragraph below:

Referring to Figure 6, in this embodiment the laminated bushings 10 secure mounting brackets 46 for a stabilizer bar 48 to direct and control movement of the stabilizer bar 48 proportionally to an applied force. The stabilizer bar 48 is mounted within the laminated bushings 10 that are in turn mounted to the body of the motor vehicle schematically shown as 47. The ends of the stabilizer bar 50 are attached to a wheel assembly (Not Shown) of the motor vehicle such that during a turn one arm of the stabilizer bar is twisted to transmit a counter rotational force across the vehicle to a side opposite the turn to inhibit roll of the body of the motor vehicle 47. The laminated bushings 10 controls the amount of rotation in proportional response to the applied forces such that a roll rate of the vehicle body of the motor vehicle 47 is controlled. In this embodiment the laminated bushings 10 can include spirally wound grooves 28 to control linear movement along an axis 51 as well as rotational movement.

60130-1026 01MRA0140

Please replace paragraph 30 on page 7 with the paragraph below:

Referring to Figure 8, another embodiment of the laminated bushing 10 is shown utilized as a door hinge 64 to allow directional motion of the door as well as providing a means of holding a door 66 open in various intermediate positions. The laminated bushing 10 is mounted vertically along an the longitudinal axis 14 and includes spirally wound grooves 28. The laminated bushing 10 is mounted to a support 68 such that the weight of a door 66 is exerted downward onto the laminated bushing 10. The spirally wound grooves 28 are disposed on the laminated bushing 10 such that opening of the door 66 moves the inner sleeve 22 upwardly an amount proportional to the amount in which the door 66 is opened or rotated. The weight of the door 66 exerts a force downward on the laminated bushing 10 such that the door 66 will be directed to rotate toward a closed position. The downward force exerted on the laminated bushing 10 causes the door 66 to rotate toward the closed position.

Please replace paragraph 33 on page 33 with the paragraph below:

The method also includes the step of mechanically forming a plurality of grooves within the metal sheet. As discussed hereinabove, the grooves 24 may be of any configuration and extend in any direction. The resilient material is then adhered to the metal sheet 12 and wound to form the spiral spirally shaped cavity 20.